

UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT(S) Li et al.

GROUP ART UNIT: 2871

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EXAMINER: Richard H. Kim

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Confirmation No. 3222

TITLE:

DISPLAY AND SOLAR CELL

AMENDMENT

This amendment is being filed electronically
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

In response to the Office Action dated Mar. 6, 2006, please amend the above-identified application as follows:

Amendments to the Claims:

1. (Currently Amended) A device comprising:

- a solar cell;

- a reflective liquid crystal display having a backside and a front side and having one of selectively reflecting cholesteric and polymer dispersed liquid crystal such that at least some light passing from the front side and through the backside of the reflective liquid crystal display will illuminate a substantially uniform dark-colored light-receiving active surface of [a] the solar cell, wherein the solar cell has a light-receiving inactive surface that has a different color than the substantially uniform dark-colored light-receiving active surface; and

-a mask having apertures that substantially conform topographically to the light-receiving active surface[s] of the solar cell and mask surfaces that substantially conform to at least some of the light-receiving inactive surface and that has a color that substantially matches the substantially uniform dark-colored light-receiving active surface of the solar cell.

2. (Original) The device of claim 1 and wherein at least some of the light passing from the front side and through the backside of the reflective liquid crystal display will illuminate the light-receiving active surface without first passing through a polarizing layer.

3. (Canceled)

4. (Original) The device of claim 1 and further comprising a wireless communications device having a user interface operably coupled to the reflective liquid crystal display.

5. (Original) The device of claim 4 wherein the wireless communications device further includes a battery charger that operably couples to the solar cell.

6. (Original) The device of claim 4 wherein an electricity output of the solar cell is operably coupled to at least one of the reflective liquid crystal display and the wireless communications device.

7. (Original) The device of claim 1 and further comprising a plurality of solar cells.

Please cancel claim 8.

9. (Withdrawn) A device comprising:

- a display comprising:
 - one of:
 - a reflective liquid crystal display having a backside and a front side and having one of supertwist nematic and twisted nematic liquid crystal; and
 - an organic light emitting diode display having a backside and a front side; and
 - a selective color reflector disposed substantially parallel to the backside of the display;
- a solar cell having a substantially uniform dark-colored light-receiving active surface disposed proximal to a backside of the selective color reflector such that at least some light passing from the front side and through the backside of the selective color reflector will illuminate the light-receiving active surface.

10. (Withdrawn) The device of claim 9 wherein the display further comprises a polarizing layer disposed proximal to the front side of the reflective liquid crystal display.

11. (Withdrawn) The device of claim 9 wherein the selective color reflector reflects at least wavelengths that correspond to a first color but not all visible spectrum colors.

12. (Withdrawn) The device of claim 9 and further comprising a wireless communications device having a user interface operably coupled to the display.

13. (Withdrawn) The device of claim 12 wherein the wireless communications device further includes a battery charger that operably couples to the solar cell.

14. (Withdrawn) The device of claim 12 wherein an electricity output of the solar cell is operably coupled to at least one of the display and the wireless communications device.

15. (Withdrawn) The device of claim 9 and further comprising a plurality of the solar cells.

16. (Canceled)

17. (Withdrawn) The device of claim 16 wherein the light-receiving active surface is substantially black-colored.

18. (Withdrawn) The device of claim 16 and further comprising a wireless communications device having a user interface operably coupled to the display.

19. (Withdrawn) The device of claim 18 wherein the wireless communications device further includes a battery charger that operably couples to the solar cell.

20. (Withdrawn) The device of claim 18 wherein an electricity output of the solar cell is operably coupled to at least one of the display and the wireless communications device.

21. (Withdrawn) The device of claim 16 and further comprising a plurality of the solar cells.

22. (Withdrawn) A device comprising:

- a touch sensitive display having a substantially transparent backside;
- a reflective liquid crystal display selected from one of:
 - a first liquid crystal display having a backside and a front side and having one of cholesteric and polymer dispersed liquid crystal; and
 - a second liquid crystal display having a backside and a front side and having one of supertwist nematic and twisted nematic liquid crystal material and a selective color reflector disposed substantially parallel to the backside of the second liquid crystal display;
- a solar cell having a substantially uniform dark-colored light-receiving active surface disposed proximal to the backside of at least one of the reflective liquid crystal display and the touch sensitive display such that at least some light passing through at least one of the reflective liquid crystal display and the touch sensitive display will illuminate the light-receiving active surface.

23. (Withdrawn) The device of claim 2 wherein the light-receiving active surface is substantially black-colored.

24. (Withdrawn) The device of claim 21 wherein the solar cell is disposed proximal to the backside of both the reflective liquid crystal display and the touch sensitive display such that at least some light passing through both the reflective liquid crystal display and the touch sensitive display will illuminate the light-receiving active surface.

25. (Withdrawn) A device comprising:

- a reflective liquid crystal display having a backside and a front side and including mono-cholesteric liquid crystal;
- a solar cell having:
 - a substantially uniform dark-colored light-receiving active surface disposed proximal to the backside of the reflective liquid crystal display such that at least some light passing from the front side and through the backside of the reflective liquid crystal display will illuminate the light-receiving surface ; and
 - a light-receiving inactive surface that has a different color than the substantially uniform dark-colored light-receiving active surface;
- a substantially transparent coupling layer disposed between the backside of the reflective liquid crystal display and the light-receiving active surface of the solar cell; and
- a mask having apertures that substantially conform to the light-receiving active surfaces of the solar cell and mask surfaces that substantially conform to at least some of the light-receiving inactive surface and that has a color that substantially matches the substantially uniform dark-colored light-receiving active surface.

26. (New) The device of claim 1 wherein the mask comprises paint deposited on the light-receiving inactive surface of the solar cell.

27. (New) A device comprising:

- a solar cell package;
- a reflective liquid crystal display having a backside and a front side and having one of selectively reflecting cholesteric and polymer dispersed liquid crystal, wherein at least some light passing from the front side and through the backside of the reflective liquid crystal display will illuminate a substantially uniform dark-colored light-receiving active surface of the solar cell package, and wherein the solar cell package has a surface inactive to light that has a different color than the substantially uniform dark-colored light-receiving active surface; and
- a mask that covers at least a portion of the surface that is inactive to light, that has apertures that substantially conform topographically to the substantially uniform dark-colored light-receiving active surface of the solar cell package, and has a color that substantially matches a color of the substantially uniform dark-colored light-receiving active surface.

28. (New) The device of claim 27 wherein the mask comprises paint deposited on the solar cell package whereat the mask covers at least a portion of the surface that is inactive to light.

29. (New) The device of claim 27 wherein the solar cell package comprises one or more solar cells.

REMARKS/ARGUMENTS

Claim 1 has been changed. Claims 3, 8, and 16 have been canceled. Claims 9-15 and 17- 25 have been withdrawn. Claims 26, 27, 28, and 29 are new. Claims 1, 2, 4-7, and 26-29 are now in the application.

Claim 8 was objected to as being dependent upon a rejected base claim, but was stated to be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claim.

Claim 1 has been changed to include all the limitations of claim 8 and to explicitly cite the solar cell as an element. The explicit citation of the solar cell is not in response to an examiner's rejection, nor to obtain patentability (since patentability has been acknowledged with the addition of claim 8), but to improve the form of the claim. Since claim 1 meets the requirements of the examiner's rejection of claim 8, applicants believe that it is allowable.

Claims 2, 4-7, and 26 depend from amended claim 1; therefore applicants believe they are allowable.

Applicants believe that claims 27-29 are also allowable.

Applicants note that any amendments or claim cancellations made herein and not substantively discussed above are made solely for the purposes of more clearly and particularly describing and claiming the invention, and not for purposes of overcoming art. The Examiner should infer no (i) adoption of a position with respect to patentability, (ii) change in the Applicant's position with respect to any claim or subject matter of the invention, or (iii) acquiescence in any way to any position taken by the Examiner, based on such amendments or cancellations not substantively discussed. Furthermore, any remarks made herein with respect to a given claim or amendment are intended only in the context of that specific claim or amendment, and should not be applied to other claims, amendments, or aspects of Applicant's invention.

Applicant specifically reserves the right to prosecute claims of differing and broader scope than those presented herein, in a continuation application.

The Applicants believe that the subject application, as amended, is in condition for allowance. Such action is earnestly solicited by the Applicants.

In the event that the Examiner deems the present application non-allowable, it is requested that the Examiner telephone the Applicant's attorney or agent at the number indicated below so that the prosecution of the present case may be advanced by the clarification of any continuing rejection.

Please charge any fees that may be due to Deposit Account 502117, Motorola, Inc.

Respectfully submitted,

SEND CORRESPONDENCE TO:

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